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OE.		6,083,750	ļ	Chamberlain et al.	07/04/2000	,
97	ļ	6,204,052		Bout et al.	03/20/2001	
Or .		6,225,113 B1		Brough et al.	05/01/2001	
A		6,225,289		Kovesdi et al.	05/01/2001	
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	FOREIGN PATENT DOCUMENTS						
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<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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EL		BRIDGE, EILEEN, ET AL., "Adenovirus Early Region 4 and DNA Synthesis", December 21, 1992, Virology 193, 794-801 (1993).	
01		GRAHAM, FRANK L., ET AL., "Defective Transforming Capacity of Adenovirus Type 5 Host-Range Mutants", November 28, 1977, Virology 86, 10-21 (1978).	
(I)		RAMSEY, W. JAY, ET AL., "Adenovirus Vectors as Transcomplementing Templates for the Production of Replication Defective Retroviral Vectors", May 1, 1998, Biochemical and Biophysical Research Communications <b>246</b> , 912-919 (1998).	
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(1999)  Bischoff, et al., "An Adenovirus Mutant That Replicates Selectively in p53-Deficient Human Tumor Cells", Science 274:373-376 (1996)  Caplen, et al., "Adeno-retroviral chimeric viruses as in vivo transducing agents", Gene Therapy 6:454-459 (1999)  Wildner, et al., "Adenoviral vectors capable of replication improve the efficacy of HSVtk/GCV suicide		Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s).	T 2				
Cells", Science 274:373-376 (1996)  Caplen, et al., "Adeno-retroviral chimeric viruses as in vivo transducing agents", Gene Therapy 6:454-459 (1999)  Wildner, et al., "Adenoviral vectors capable of replication improve the efficacy of HSVtk/GCV suicide	ge							
459 (1999)  Wildner, et al., "Adenoviral vectors capable of replication improve the efficacy of HSVtk/GCV suicide	07		Bischoff, et al., "An Adenovirus Mutant That Replicates Selectively in p53-Deficient Human Tumor Cells", Science 274:373-376 (1996)					
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ECH CENTER 1600/2900 Substitute for form 1449A/PTO Complete if Known **Application Number** 09/871,183 INFORMATION DISCLOSURE STATEMENT BY APPLICANT Filing Date May 31, 2000 **First Named Inventor** Higginbotham, James N. **Group Art Unit** 1636 (Use as many sheets as necessary) **Examiner Name** Washington, Tara DAVID GUZO Sheet of Attorney Docket Number P04580US1

				U.S. PATENT DOCUMEN	rs	
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Initials *	No. 1	publisher, city and/or country, sale, page(s), volume-issue number(s).	T
	"	Cosset, A New Avian Leukosis Virus-Based Packaging Coll II- The Avian	+
H		Transcomplementing Helper Genomes," Virology, Vol. 64, (No. 3,) pp. 1070-01078, (1990)	
	5	Dion, "Quantitative And In Vivo Activity Of Adenoviral-Producing Cells Made By Cotransduction Of A Replication-Defective Adenovirus And A Replication 5 and 10 areas for the contraction of the Contraction	+
82		Replication-Defective Adenovirus And A Replication-Enabling Plasmid," Cancer Gene Therapy, Vol. 3 (No. 4,) pp.230-237, (1996)	٠   ١
	6	Ditzhuijzen, "Benefits From The Automation Of A Rolling Mill," Steel Times International, 13 , (No. 5,) pp.36-38, (1989)	_
91		pp.36-38, (1989) Steel Times International, 13 , (No. 5,)	
	7	Feng, "Stable In Vivo Gene Transduction Via A Novel Adenoviral/Retroviral Chimeric Vector," Nature Biotechnology Vol 15, pp.866-870 (Sentember 1997)	
97		Biotechnology Vol 15, pp.866-870 (September 1997)	
	8	Kerner, "Complementation Of Adenovirus E4 Mutants By Transient Expression Of E4 cDNA And Deletion Plasmids." Nucleic Acids Research Vol. 477 (t)	_
g!		Deletion Plasmids," Nucleic Acids Research, Vol. 17, (No. 8,) pp.3037-3048, (1989)	
	9	Lanuti, "Evaluation Of An E1E4-Deleted Adenovirus Expressing The Herpes Simplex Thymidine Kinase Suicide Gene In Cancer Gene Thoragon The	L
,91		Kinase Suicide Gene In Cancer Gene Therapy," Human Gene Therapy, Vol. 10, pp.463-475, (February 1999)	
	10	Mandell, "Gene Therapy Of Cancer By Retroviral Transfer And Expression Of The Rat Sodium/lodide Symporter (NIS)" Proceedings Of The Applied Mosting Of The	_
جو		Symporter (NIS)" Proceedings Of The Annual Meeting Of The American Association For Cancer Research, Vol. 38. (No. 1,) p. 381, (March 1997)	
n	11	Noguiez-Hellin, "Generation Of A Transcomplementable Defective Recombinant Provirus Transducing A Foreign Gene," Medical Sciences, Vol. 319, pp.45-50, (1996)	
	12	Okada, "Efficient Directional Cloning Of Possentian A 4	
7		Okada, "Efficient Directional Cloning Of Recombinant Adenovirus Vectors Using DNA-Protein Complex," Nucleic Acids Research, Vol. 26, (No. 8,) pp. 1947-1950	×

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